MICROCOPY RESOLUTION TEST CHART

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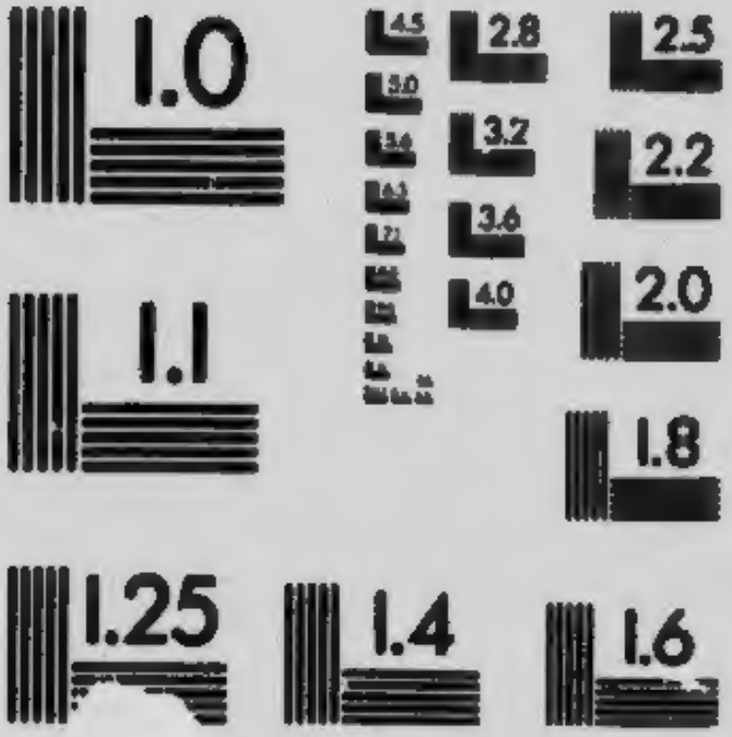

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Reprinted from the Illinois Medical Journal, issue of October, 1915.

WHY THE DELAY IN RECOGNIZING LOCOMOTOR ATAXIA?*

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It may seem presumptuous for one to take up the time and attention of this meeting in merely trying to lay emphasis upon conditions which are already well known to all of us, and which, too, many of us take for granted, are or should be known by every one aiming to practice medicine, but judging from the frequency with which the early manifestations of locomotor ataxia are attributed to and treated for some entirely different diseased condition, it is evident that more attention should be given to this disease and allied conditions, and greater stress placed upon the importance of the early recognition of such symptoms as are usually found in the early stages. Furthermore, since it is well known that when once the destructive changes in the neurons of the central nervous system have taken place, no form of treatment can restore them, and since the pathological-anatomical changes in this disease are ultimately destructive in character, it is only too evident that the earlier the character of the disease-process is recognized and appropriate

*Read at meeting of Alienists and Neurologists, Chicago, July 12, 1915.

treatment administered to interrupt or inhibit the activity of the causative factors, the spirochaete pallida or the toxic products of its activity, the better will be the results of that treatment.

Meeting so frequently with patients complaining of symptoms which point incontrovertibly to the tabetic condition, and who had complained of them for years and yet the probability, often not even the possibility of the disease considered, one naturally seeks for some explanation. Two factors seem to stand out predominantly: One is the statement usually made by the attending physician that knowing the patient so well he did not believe a syphilitic infection possible, so did not suspect it, or where suspected and inquiry made, was given a positive denial either intentionally or from ignorance thereof due to the triviality of the manifestations at the time of infection. The other factor seems to be the fault of us neurologists and alienists in failing to emphasize sufficiently the necessity of always having in mind the possibility of a tabetic process where one meets with manifestations well indicative of it. With the means at our disposal at the present time, there is practically no excuse for failure to recognize the tabetic condition until the process has advanced to that stage where all who run may read. The object of this paper, therefore, is not to add anything new to our knowledge of the disease, but to emphasize the necessity of recognizing early the character and nature of those conditions which indicate the existence of the tabetic process. In our eagerness and desire to win fame and honor by discovering something new or startling, something heretofore unknown or unthought

of, we are too apt to neglect the more important, common, everyday phenomena, at the expense of the patient's health and happiness. It is not the intention to enumerate every manifestation that is met with in the early stages of the disease, nor to discuss in detail individual cases, but a synoptical outline of the early history of a few illustrative cases as ascertained by examination will be given, pointing out the unnecessary delay that occurred, and calling attention to those features which should have directed the attention of the physician to the possibility of a tabetic process, with a notation of the conditions existing at the time of examinaton.

Case 1. Male, aged fifty years. He gives a history of a possible infection at thirty-five, the physician at that time calling a local penile sore merely a so-called soft chancre. During the last ten to twelve years he has complained of more or less pain in the legs, more about the knees, varying in severity, intermittent in action, dull and aching in character, usually relieved by a course of hot baths or similar treatment. Four years ago following an attack of gonorrhea which became chronic, he suffered from what was called a nervous breakdown which was attributed to the passage of sounds in the course of the treatment. After four to five months he began to notice a difficulty in going up and down stairs; also pain across the arch of the foot and ankles, this being attributed to the condition of falling arch and flat-footedness. During the last two to three years this condition has gradually grown worse. The pains were worse at night and at changes of weather. He became more nervous, was often unable to sleep because of the pains; noticed a loss of sexual power, at times difficulty in controlling the bladder, a numbness in the fingers and hands, less so in the feet; a sense of early fatigue after exercise, of weakness in the knees and stiffness in the feet, and a tendency

to stagger when first getting on his feet to walk. Under the influence of alcoholic stimulants the difficulty in gait and the sensory disturbances apparently disappeared temporarily, or at least he became unconscious of their presence.

Examination of this patient disclosed unequal pupils manifesting the Argyll-Robertson phenomenon absent tendon reflexes in both arms and legs; marked Romberg swaying, marked ataxia and inco-ordination in the movements of the arms and legs; a loss of the sense of movement in the toe and ankle joints; a marked delay in the perception of the pinprick, and a more or less general hyperesthesia to heat and cold. The blood and spinal fluid each gave a four-plus positive Wassermann reaction. This patient during the last three to four years has passed through the hands of several physicians, osteopaths and chiropractors, and even at the time of examination had been referred to a surgeon for advice and treatment in regard to the falling arches, which were regarded as the seat of the trouble. The loss of bladder control and of sexual power was attributed to the indiscriminate use of the urethral sounds. The pains in the feet and legs and the difficulty in walking were attributed to the falling arches, and the general nervousness due to the pain and the disturbance of sleep.

The early pains in this patient were undoubtedly tabetic in origin, since they were not arthritic, had not the character of a peripheral neuritis, were transitory in duration, changeable in character, not associated with any local disturbances, and showed a tendency to be worse at night and during changes of weather. These features taken individually may not mean much, but taken collectively are almost pathognomonic of tabetic pains. It is quite probable that had a proper examination been made when these pains first ap-

peared there would have been found other evidences of the presence of the tabetic process.

Case 2. Male, aged forty-five years. History of luetic infection eleven years ago. Three years ago he began to have attacks of pain in the upper abdominal region, located mostly between the median line, the level of the umbilicus, and the right costal margin. The pains were sudden in onset, spasmodic, griping in character, were associated with nausea and vomiting, were relieved only by opiates, were not followed by any local soreness or tenderness and recurred at first at irregular intervals, but of late they have been more frequent, occurring about every week or ten days. This patient was treated by several physicians for gastric and for gall-bladder disease. He had also consulted several surgeons, who also diagnosed gall-bladder disease, probably calculus, and had advised operation.

At the time of examination there was found the Argyll-Robertson pupil, slight Romberg swaying, absence of the patellar and Achilles tendon reflexes, anesthesia over the outer side of both legs, retardation of pain and pressure sense in both feet and legs. The abdominal examination was negative or at least doubtful.

From these clinical data the diagnosis of tabetic crisis was made. As this was before the advent of the Wassermann reaction, or before much attention was given to the spinal fluid for luetic states, no data are at hand in this regard.

The family physician disagreed with the diagnosis, and when the surgeon who had referred the patient for a neurological examination declined to operate he persuaded the patient to submit to an operation, but failed to find any evidence of a surgical pathological process in the abdominal cavity. Also the subsequent history of the patient's illness proved it to be wholly tabetic in origin.

It is not uncommon to meet with cases of locomotor ataxia in which acute pains of this type and character are the first manifestations

that lead the patient to seek medical advice, although close interrogation will usually disclose the presence of other disturbances which had existed for a variable length of time, but were not sufficiently prominent to attract much attention or cause much discomfort or distress. When such severe pains are more or less constantly located in one or other of the special organs they constitute the more common form of the so-called tabetic crisis. But it must be borne in mind that pain is not the only way in which such a crisis may manifest itself. The pain may be entirely wanting, and in its place there may appear an uncontrollable vomiting, an unexplainable diarrhea, a profuse polyuria, an ungratifiable erotic sensation, etc., any one of which may be the only prominent manifestation in the earlier stage of the disease.

Case 3. Female, aged forty-five years. Widow of an army officer. Ten years before the time of examination she suffered from an attack of herpes zoster completely encircling the body at the waistline, following which there persisted a feeling of heaviness and of a band-like constriction. About a year later she began to have pains in both heels, sudden in onset, transitory in duration, and stabbing in character. Later these extended up the inner side of the legs. Two years later she began to notice a difficulty in walking, particularly at night, describing it as a feeling or sensation as if on skates, also a numbness in the whole lower extremities.

Various physicians were consulted and she spent several years in various sanitarias, her condition being regarded as a nervous breakdown incident to the approaching menopause.

Examination disclosed unequal pupils, the Argyll-Robertson phenomenon, absent patellar and Achilles

tendon reflexes, paresthesia of the lower extremities, a marked Romberg, marked ataxia and incoordination, and the blood gave a four-plus positive Wassermann reaction.

The patient gave a negative history and bitterly resented any suggestion of it being syphilitic in origin after having insisted that she be told definitely and specifically the nature and origin of her trouble. In this idea that the diseased condition could not possibly be syphilitic in origin she was supported by several physicians who had previously treated her. As a result of this disagreement she discarded medical advice and took up Christian Science for several years, but finding herself gradually growing worse she later accepted the situation more philosophically and decided to secure what relief was possible by appropriate treatment.

It can scarcely be questioned that the bilateral zoster followed by a persisting feeling of heaviness and girdle sensation was a direct result and manifestation of the incipient tabetic process, and it is probable that had a proper examination been made at that time the specific nature of the trouble would have been recognized and all these years would not have elapsed before being placed under proper treatment.

Case 4. Male, aged thirty-one years. History of infection twelve to fifteen years before. Three years ago the left eye turned inward, causing double vision, lasting several days. Eight months ago he began to notice a dimness of vision in the left eye, gradually growing worse, and five months later also involving the right eye. About this time he began to notice some difficulty in walking, especially at night; a tendency to fall and an inability to tell the position of the feet when the eyes were closed.

When the visual disturbance first began he consulted an optometrist, who fitted him with glasses, but receiving no benefit they were changed from time to time. Finally, he consulted an oculist who recog-

nized the nature of the trouble and advised him to consult a neurologist.

Examination disclosed an advanced optic atrophy with practically complete blindness in the left eye and almost complete blindness in the right one; unequal pupils not reacting to light, but reacting to accommodation attempts, marked Romberg swaying; absent tendon reflexes, delayed pain sensation; loss of sense of position and of movement; impaired perception of touch and temperature. Wassermann spinal fluid examinations were not made, as the patient was seen before the advent of the Wassermann reaction.

Paresis or paralysis may occur early, involving either a single muscle or part or all of a functionally associated group of muscles, or involving all or only part of the distribution of a peripheral nerve. These paralyses are usually transient in duration, recovering in a few days, weeks or months, and may be paroxysmal or periodic like the pains (Pitres), assuming an apoplectiform character. There may be a mere sense of fatigue, a fatigue out of all proportion to the amount of muscular exercise, this often preceding for months the onset of a definite paralysis. Of these paralyses those involving the ocular group of muscles are probably the most frequently affected. Impairment of the pupillary reflex, particularly to light, sometimes also to accommodation, is one of the earlier and most constant findings, the time of disappearance of the pupillary response being very difficult to fix, as it is usually absent by the time examinations are made.

Case 5. Male, aged fifty-two years. Denied syphilitic infection. About a year ago he began to suffer from more or less stomach trouble and was treated for the usual "indigestion." The following winter after the stomach trouble had existed about six

months he contracted a severe attack of influenza, following which there developed urinary incontinence which was subject to remissions. Two months later he began to notice a difficulty in walking and a feeling of weakness or giving-way of the knees at times. Examination disclosed the presence of the Argyll-Robertson pupil, absent patellar and Achilles reflexes, incoordinate, ataxic gait, loss of control of the vesical sphincter, a positive Wassermann of the blood and spinal fluid; the latter also containing an excess of protein content and a cell count of about 100 per c.mm.

Disturbance of the bladder control or of the sexual function is not an infrequent early symptom and should always arouse suspicion of a possible lues. Difficulty in expulsion or in retention of the urinary flow, abnormally active erotic sensations, causeless erections and emissions, sterility in females, etc., are some of the more common disturbances of these functions.

It is not necessary to burden you with more illustrations along this line. Those that have been given serve to illustrate one of the most important points it is desired to make; namely, that in practically all cases of locomotor ataxia there is an unnecessary and uncalled-for delay in the recognition of the tabetic or syphilitic nature of the early manifestations. I am satisfied that this is the experience common to all of you, and certainly calls for greater effort on the part of those teaching neurology and psychiatry and those of us who are assuming to be neurologists and alienists, in directing attention to those conditions which should always lead one to be on the lookout for a luetic involvement of the nervous system.